



The Kentucky Board of Respiratory Care is a Government Agency that regulates respiratory care practitioners and their services. The KBRC was established in 1990 to protect the citizens of the Commonwealth of Kentucky from

WE LISTEN TO EVERY BREATH YOU TAKE

KBRC NEWSLETTER

2016 Fall/Winter

Board Information

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Pamela Boykin, RRT
Board Member

Alexander Tzouanakis, M.D.
Board Member

John Marcus Jones, AAG
Attorney

Peggy Lacy Moore
Executive Director

Rick L. Rose
Administrative Assistant

**The KBRC Office can be
reached at the numbers
listed below.**

Board Office:

**2365 Harrodsburg Rd.
Suite B350
Lexington, KY 40504-3386
Phone(859) 246-2747,**

**Fax: (859) 246-2750 or
online at: <http://kbrc.ky.gov>**

The KBRC is now on:



New Address for the KBRC Office

The KBRC office and staff moved back in March and want to make sure that therapists use the correct address when sending in renewals by mail or other documents:

Kentucky Board of Respiratory Care

2365 Harrodsburg Rd., Suite B350

Lexington, KY 40504-3386

The 2017 KBRC Renewal

The KY Board of Respiratory Care with the assistance of KY. Gov announces online licensure renewal for respiratory therapists beginning on November 1, 2016. We strongly encourage you to use this service. Again we are pleased to offer you the ability to print your renewal I.D. card before you exit the online renewal window. On Nov. 1, 2016, a link will appear on the KBRC website that will allow you to print a 2017 renewal form. (Be aware that the same criteria stated above will also comply on the renewal paper forms you submit by mail and will be overviewed by the KBRC). If you are not working it's best to file inactive status.

Note* If you renew in 2017 and do not have twenty four CEUs by Dec. 31, 2016 then be prepared for the following consequences :

Fine of \$250.00 for therapists who were not slated for audit and double the amt. of CEUs not completed.

Fine of \$500.00 for therapists who were slated for audit and double the amt. of CEUs not completed.

New Fee Changes from the KBRC Office

KY Board of Respiratory Care - Notice of Approved Fee Changes

August 17, 2016

KBRC Regulations: 201 KAR 29:015 Fees

The KY Health & Welfare Committee of the KY Legislature met on August 17, 2016 and reviewed Administrative Regulation 201 KAR 29:015. The Board was represented by Tami McDaniel, Vice-Chair, Kathleen Kearney Schell, Citizen at Large Member, Attorney John Marcus Jones, AAG, and Peggy Lacy Moore, Executive Director at the meeting. This is the second request since 2006 to increase licensure fees since 314A was enacted in the 1990 Legislative Session. The following fee structure was approved by the Legislative Health & Welfare Committee and became effective on **August 17, 2016**.

✓ <u>New Fees:</u>	<u>Old Fee</u>	<u>New Fee</u>
✓ Limited/Student:	\$50	\$60
✓ Mandatory/Temp	\$85	\$102
✓ Mandatory/NBRC	\$125	\$150
✓ Reinstatement:	\$150	\$180
✓ Reactivation	\$75	\$90
✓ Renewal	\$75	\$90
✓ Inactive Renewal	\$25	\$30

The Board discussed the issue of increasing fees over several years and proposed a 20% increase on all fees to keep providing services you enjoy with only two full-time staff. Please know when your licensure is to be renewed and keep up your Ceu's as some therapists lag on getting Ceu's and face penalties of \$250 or \$500 fines by Agreed Orders at the end of a renewal cycle by audit. Some fail to renew and are caught working on expired licensure certificates which jeopardized the businesses they're working for by providing unlicensed respiratory services. Unlicensed respiratory services usually have to be reimbursed to federal/state entities and the Board will continue to propose a penalty by agreed order for the folks who are unlicensed and practice respiratory care. All practitioners will pay the amount for each licensure certificate with no refunds.

Changing of the Guard: New Executive Director for the KBRC

Saying goodbye to Ms. Peggy Lacy Moore and hello to Tamara G. McDaniel



Ms. Peggy Lacy Moore has been with the KBRC office for sixteen years. Her work along with other former and current Board members was very instrumental and crucial for the Board's initial growth and stability during the original move from Frankfort to Lexington, KY in 2000. Her experience with state government, working with the public, customer assistance and ability to work with staff and an ever changing Board has proven to be a tremendous asset to the KBRC and our therapists throughout the state. She has overseen the moves of the KBRC office from 801 E. Main St. downtown Lexington

to the Spindletop Administration Bldg. in 2005; then to 163 W. Short Street in 2010 and now Southcreek Park in March 2016. Her kindness and leadership skills helped train a young Administrative Assistant to learn and serve the Board. The KBRC Board and staff wish to thank you for your service these 16 years; and congrats on your retirement years, on Nov. 1, 2016.



Ms. Tamara G. McDaniel was hired for the position of Executive Director of the Kentucky Board of Respiratory Care and will begin duties in that capacity on September 1, 2016. She has experience working with the current staff as well as being a Board member and former chairperson. Ms McDaniel will bring her RRT field experience from working as a respiratory therapist for almost 30 years. She has also worked with and been a member of the KSRC and will bring a wealth of skills and knowledge to the KBRC office. The KBRC is happy to welcome her on board, starting Sept. 1, 2016.

Common pesticides linked to allergic and non-allergic wheeze among farmers

New research from North Carolina State University connects several pesticides commonly used by farmers with both allergic and non-allergic wheeze, which can be a sensitive marker for early airway problems. NC State epidemiologist Jane Hoppin and colleagues from the National Institute of Environmental Health Sciences (NIEHS), the National Cancer Institute, Westat and the National Institute for Occupational Safety and Health (NIOSH) used interview data from the 2005 - 2010 Agricultural Health Study (AHS) to evaluate the association between allergic and non-allergic wheeze and 78 pesticides. The AHS is a longitudinal study of farmers and their spouses in Iowa and North Carolina. For the purposes of this analysis, the researchers only used data from the male farmers. In the current study, 22,134 farmers reported which pesticides they had used in the last year, and specific respiratory symptoms they had experienced. Allergic wheeze was defined as reporting both wheezing and doctor-diagnosed hay fever, while non-allergic wheeze was defined as reporting wheezing but no hay fever. The researchers used this information in statistical models to compare the control group -- farmers who had never used the pesticide in question -- to those who had used it, and to compare the frequency of either allergic or non-allergic wheeze. The 78 pesticides included 45 herbicides and plant growth regulators, 25 insecticides, six fungicides, one fumigant and one rodenticide. Of the 78 assessed, 29 were associated with at least one type of wheeze: 19 were significantly associated with allergic wheeze, 21 with non-allergic wheeze and 11 were significantly associated with both. In the herbicide group, 18 were associated with at least one wheeze outcome, 14 with non-allergic wheeze and 10 with allergic wheeze. Glyphosate, the most commonly used herbicide in the world, was associated with both types of wheeze. Interestingly, the less commonly used herbicide glufosinate ammonium was not associated with either type of wheeze. In the insecticide group, nine of the 25 were associated with at least one type of wheeze. Permethrin and pyrethrins were associated with both types of wheeze. And in the fungicide, fumigant and rodenticide group, none were associated with non-allergic wheeze, and only the rodenticide warfarin was associated with allergic wheeze. "This is the most comprehensive list of pesticides in relation to wheeze that has been evaluated to date," Hoppin says. "Fifty-one of the pesticides we tested in this study had never been analyzed in terms of their effects on respiratory outcomes. And some of them, like glyphosate, 2,4-D and permethrin, aren't just used on farms. They're used residentially now to kill weeds or treat fleas on pets. We believe it's important information that will help people make decisions about pesticides."



New drug could help decrease symptoms of asthma

"This new drug could be a game changer for future treatment of asthma" - Professor Chris Brightling, NIHR Senior Research Fellow at the University of Leicester

The first new asthma pill for nearly 20 years has the power to significantly reduce the severity of the condition, a study led by the University of Leicester has found. The research was funded by Novartis Pharmaceuticals, National Institute for Health Research (NIHR) and the EU (AirPROM), and is described by the lead researcher as "a game changer for future treatment of asthma." Three people die every day because of asthma attacks and research shows that two thirds of asthma deaths are preventable, according to Asthma UK.

Fevipirant (QAW039) significantly decreased the symptoms of asthma, improved lung function, reduced inflammation and repaired the lining of airways. The drug is currently being evaluated in late stage clinical trials for efficacy in patients with severe asthma, according to ClinTrials.gov.

A total of 61 people took part in the research. One group was given 225mg of the drug twice a day for 12 weeks and the other participants were assigned to a placebo group. Fevipirant and the placebo were added to the medications the participants were already taking. The sputum eosinophil is an inflammation measurement of a white blood cell that increases in asthma and is used to assess the severity of this condition. *(Continued on page 5)*

New drug could help decrease symptoms of asthma *(Continued from page 4)*

People who do not have asthma have a percentage of less than one and those with moderate-to-severe asthma typically have a reading of about five per cent. The rate in people with moderate-to-severe asthma taking the medication was reduced from an average of 5.4 percent to 1.1 percent over 12 weeks, according to the study published today in the prestigious *The Lancet Respiratory Medicine* journal.

Professor Christopher Brightling, who is a NIHR Senior Research Fellow and Clinical Professor in Respiratory Medicine at the University of Leicester, led the study at the NIHR Respiratory Biomedical Research Unit, which is based at the Glenfield Hospital in Leicester.

Professor Brightling said: "A unique feature of this study was how it included measurements of symptoms, lung function using breathing tests, sampling of the airway wall and CT scans of the chest to give a complete picture of how the new drug works. "Most treatments might improve some of these features of disease, but with Fevipiprant improvements were seen with all of the types of tests. "We already know that using treatments to target eosinophilic airway inflammation can substantially reduce asthma attacks. "This new treatment, Fevipiprant, could likewise help to stop preventable asthma attacks, reduce hospital admissions and improve day-to-day symptoms- making it a 'game changer' for future treatment."

Gaye Stokes from Grantham in Lincolnshire has had severe asthma for 16 years. She took part in the trial and was part of the Fevipiprant group. The 54-year-old said: "I knew straight away that I had been given the drug. I felt like a completely different person. I had more get up and go, I was less wheezy and for the first time in years I felt really, really well. "For me, it felt like a complete wonder drug and I can't wait for it to be available because I really think it could make a huge difference to me." After the 12 week trial and Gaye stopped receiving the drug, she said her health started to "go downhill again very quickly".

Professor Brightling added that the latest advance underpinned the work of the Leicester Precision Medicine Institute, a Centre of Excellence that coalesces and aligns the research missions of the University of Leicester and the NHS in Leicester. Future treatment of human disease will increasingly move from a 'one size fits all' approach to one of tailoring the treatment to the individual patient.

Asthma is a long-term condition that affects the airways. When a person with asthma comes into contact with something that irritates their sensitive airways it causes the body to react in several ways which can include wheezing, coughing and can make breathing more difficult. The NIHR Leicester Respiratory Biomedical Research Unit - a partnership between the University of Leicester and Leicester's Hospitals - focuses on promoting the development of new and effective therapies for the treatment of respiratory diseases including severe asthma and chronic obstructive pulmonary disease (COPD).

AirPROM stands for 'Airway Disease Predicting Outcomes through Patient Specific Computational Modelling'. This is the technical name for the five year Europe-wide, EU funded project, which aimed to produce computer and physical models of the whole human airway system for people with asthma and chronic obstructive pulmonary disease (COPD). AirPROM has demonstrated how an integrated approach, involving modelling, measurement and clinical validation, can accelerate the development of new therapies and improve existing methods. AirPROM is led by the University of Leicester and coordinated by Professor Brightling.

Source: University of Leicester Article on News Medical Life Sciences & Medicine August 23, 2016



This drug could end America's painkiller epidemic

by Amrith Ramkumar August 17, 2016 — 1:00 PM EDT

So far, the fight against America's opioid crisis has focused on treating addiction and curbing abuse. In February, President Barack Obama asked Congress for \$1.1 billion to fund health care for addicts, and last month Congress allocated \$181 million in grants for state programs.

But help could be on the way from scientists—help that could radically alter the American landscape of painkiller addiction and untimely death.

U.S. and German researchers have developed a pain-relieving compound, chemically unrelated to current opioids, that doesn't interfere with breathing—the main cause of prescription painkiller fatalities. The researchers introduced the compound, called PZM21, in a study published on Wednesday in *Nature*.

The drug's development, funded by the U.S. National Institutes of Health, comes at a time when the number of Americans who die each year because of overdoses (more than 47,000) has exceeded the number killed in car accidents. About 28,000 of those overdoses involved opioids, four times more than occurred in 1999, according to the Centers for Disease Control and Prevention. More than half involved prescription drugs.

"We're cautiously optimistic," said Aashish Manglik, an instructor in molecular and cellular physiology at Stanford University's School of Medicine and one of the study's main authors. He noted that the finding "hints at the possibility that there may be a possible way to separate analgesia from some of these side effects." The study also involved researchers from the University of California-San Francisco, the University of North Carolina, and Friedrich-Alexander University Erlangen-Nürnberg.

The new molecule targets the brain-mediated emotional component of pain. This allows it to kill pain just as well as morphine does, without the side effects of respiratory suppression and dopamine-driven addiction in the brain. (Regular painkillers target both the brain-mediated and reflexive response aspects of pain.) The new drug also causes less constipation and doesn't affect spinal cord reflexive responses as traditional narcotics do, according to the study.

The potential difference in addiction was shown in experiments involving mice. The specimens showed no preference for test chambers that included a solution containing PZM21, compared with chambers that didn't. In the same test, when one of the chambers had morphine, mice spent more time there. Both results distinguished the new compound from other painkillers and from Oliceridine, a comparable molecule developed by Trevena Inc. that's in clinical trials, Manglik said.

"What we've done is find new chemical matter, molecules that are really quite different from previously characterized opiates," he said.

The new compound was identified using 2012 findings by Manglik and others in the lab of Brian Kobilka, a Stanford professor of molecular and cellular physiology and a Nobel Laureate. (Kobilka was a co-senior author of the new paper.) In the earlier research, scientists described the atomic structure of the mu opioid receptor, through which painkillers such as morphine act. Understanding how the receptor interacts with morphine or other drugs let the PZM21 developers replicate morphine's benefits without setting off chemical reactions that suppress breathing.

With that information in hand, researchers were able to screen about 3 million compounds, using 4 trillion virtual simulations, to see which ones produced the right interaction with the mu opioid receptor. They came up with a short list of 23 candidates and found one that caused the right reactions after interacting with the mu opioid receptor. Then they strengthened it by a factor of 1,000. *(Continued on page 7)*

Manglik estimates that it will take multiple years for the compound to be tested in humans, noting the importance of such trials to learn more about PZM21's addictive properties and safety. "The real experiment for a lot of these things is going to have to happen in humans," he said, adding that addiction is "really a human disease."

While more testing is done to replace addictive opioids, the work on PZM21 may bear fruit in many other areas of medicine. The researchers studied a large family of receptors that communicate messages to cells, not just the mu opioid receptor, so a similar approach could yield new types of drugs for other conditions.

"It's a good example of how the type of work that we do has the potential for impact in pretty large areas of medicine," Manglik said.

IMPORTANT DATES & EVENTS

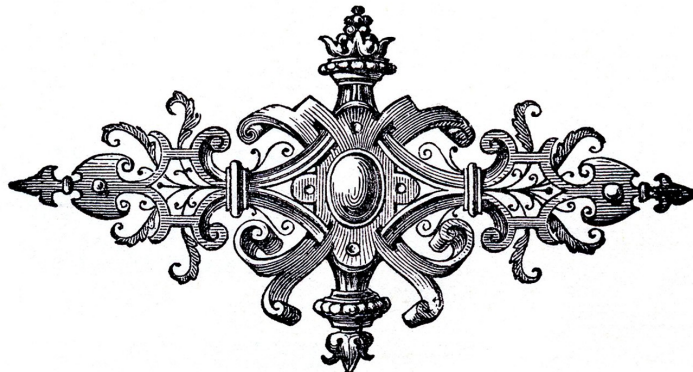
KBRC Upcoming Board Meeting Dates For 2016

October 20th @ 5:30 p.m. Location: KBRC Offices
2365 Harrodsburg Road, Suite B350
Bldg. B 150 1st Floor
Lexington, KY 40504-3386

Dec. 15th @ 5:30 p.m. Location: Bella Notte
3715 Nicholasville Rd, Lexington, KY 40503-4441

The KSRC 's Making the Connection Meeting

Location is at the Clarion Hotel Conference Center South,
5532 Athens Boonesboro Road, Lexington, KY. 40509
September 14-16. You can make reservations by calling the Conference Center at (859)-263-5241





If you did not get a chance to read the last issue of the KBRC Newsletter, You can still find it available at the KBRC website: <http://kbrc.ky.gov>

The KBRC website can help you find answers regarding your licensure, scope of practice, continuing education and verification questions. You may contact us at: (859) 246-2747 Fax: (859) 246-2750 with questions or inquiries.

The KBRC Newsletter is produced by Rick Rose, edited by Peggy Lacy Moore.

The KBRC Board is self-supporting and receives no general fund tax appropriation. It is funded through fees assessed for licensing its professionals.

If you want to file a complaint or address an issue of concern to the Board, submit a written statement with as much detail as possible including your name, names involved in the complaint or issue, phone numbers and summary of your complaint and mail to the KBRC office at the address below. Attention: Peggy Lacy Moore, Executive Director.

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CARE

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